Questions:

Q: From which language is the word science derived?

A: The word science is derived from the Latin word 'Scientia'.

Q: What does the word 'Scientia' mean?

A: 'Scientia' means knowledge.

Q: How does science pursue knowledge and understanding of the natural and social world?

A: By following a systematic methodology based on evidences.

Q: What does empirical evidence refer to?

A: Acquiring information through direct observation or experiments.

Q: On what is scientific knowledge based?

A: Scientific knowledge is based on verifiable evidence.

Q: What does objectivity mean in science?

A: The ability to see and accept the facts as they are and not as the investigator might wish them to be.

Q: What should be set aside while investigating a particular phenomenon?

A: Biases, prejudices, beliefs, wishes, values, preferences, etc.

Q: What does science aim to find through scientific causality?

A: The cause-effect relationship between variables under consideration.

Q: What does a researcher try to control in a scientific study?

A: All extraneous variables.

Q: What procedure does science adopt for studying a phenomenon?

A: A certain sequential procedure.

Q: What steps are included in the sequential procedure?

A: Identifying the problem, formulation of hypothesis, collection of facts, analysis of facts, scientific generalization and prediction.

Q: What does replication mean in science?

A: Reproducibility of scientific knowledge under the same circumstances stated anywhere and anytime.

Q: What does replication assure?

A: Replication assures the reliability of results.

Q: What is predictability in science?

A: Predictability is an important feature of science.

Q: What do scientists attempt to do besides describing phenomena?

A: They attempt to explain it and make predictions accordingly.

Questions:

Q: When did psychology begin as a branch of philosophy?

A: Psychology was a branch of philosophy until the 1870s.

Q: Who established the world's first psychology laboratory in 1879?

A: Wilhelm Wundt, a German psychologist.

Q: Where was the world's first psychology laboratory established?

A: At University of Leipzig in Germany.

Q: What event is considered the official start of psychology as a separate scientific discipline?

A: The establishment of the world's first psychology laboratory in 1879.

Q: Which school of thought is regarded as the first in psychology?

A: Structuralism.

Q: Who advocated Structuralism?

A: Wilhelm Wundt and his student Edward B. Titchener.

Q: What method did Wilhelm Wundt use to study conscious experiences?

A: Introspection.

Q: Who advocated Functionalism?

A: William James.

Q: Who is known as the father of 'American Psychology'?

A: William James.

Q: What did William James emphasize in Functionalism?

A: The study of human consciousness.

Q: Who proposed the theory of Psychoanalysis?

A: Sigmund Freud.

Q: In which decade did Freud propose Psychoanalysis?

A: In the early 1890s.

Q: What did Freud give importance to in Psychoanalysis?

A: The study of the unconscious mind.

Q: Who advocated Behaviourism?

A: John B. Watson.

Q: What did Behaviourism reject?

A: The study of conscious experiences and unconscious mind.

Q: What did Behaviourism focus on to make psychology more scientific?

A: The study of observable behaviours.

Q: Who advocated Humanistic Psychology?

A: Carl Rogers.

Q: What did Humanistic Psychology stress upon?

A: The study of power of free will, self – determination and self-actualization.

Q: Who is generally considered as the founder of Cognitivism?

A: Ulric Neisser.

Q: What do researchers in Cognitive Psychology study?

A: Higher cognitive processes like memory, decision making, problem-solving, intelligence, language, etc.

Q: Which tools are used in Cognitive Psychology research?

A: MRI and PET scans.

Research methods in psychology

Experimental method

Most scientific methods of studying behaviour

Status of science to psychology

Identifying problem

Developing hypothesis

Conducting experiment and collecting data

Analysing data

Drawing conclusions

Objective methods of collecting data

Accurate observations in controlled conditions

Cause-and-effect relationship

Findings are verifiable

Questions:

Q: What is one of the most scientific methods of studying behaviour?

A: Experimental method.

Q: Which method has assigned the status of science to psychology?

A: Experimental method.

Q: What is the first step in the experimental method?

A: Identifying problem.

Q: What step follows identifying the problem?

A: Developing hypothesis.

Q: Which step involves gathering information through actual testing?

A: Conducting experiment and collecting data.

Q: What is done after analysing data in the experimental method?

A: Drawing conclusions.

Q: Which method is one of the most objective methods of collecting data?

A: Experimental method.

Q: What does the experimental method enable in controlled conditions?

A: Accurate observations.

Q: What relationship does the experimental method help to find?

A: Cause-and-effect relationship.

Q: What is true about the findings of the experimental method?

A: Findings are verifiable.

Survey method

Pre-defined group of respondents

Questionnaires, checklists, rating scales

Social psychologists

Economic and efficient method

Email, telephonic calls, direct interaction

Observation method

Behaviour is observed

Natural observation

Controlled observation

Child psychologists

Scientific method

Case study method

Qualitative research methods

Clinical psychologists

Sigmund Freud

Jean Piaget

In-depth look

Rich descriptive information

Multiple sources

Psychological tests

Questions:

Q: What is a survey defined as?

A: A research method used for collecting data from a pre-defined group of respondents.

Q: What tools are used in the survey method to collect information?

A: Questionnaires, checklists, rating scales, inventories, interviews etc.

Q: Who largely uses the survey method?

A: Social psychologists, educational psychologists, industrial psychologists etc.

O: How are surveys undertaken?

A: Using email, telephonic calls or direct interaction with respondents.

Q: In which areas is the observation method useful?

A: In the areas where experiments cannot be conducted.

Q: What does the observation method involve?

A: Behaviour is observed in a natural or laboratory setting.

Q: What is observation in a natural setting called?

A: Natural observation.

Q: What is observation in a laboratory setting called?

A: Controlled observation.

Q: Who widely uses the observation method?

A: Child psychologists, clinical psychologist, social psychologists, etc.

- Q: When is observation method beneficial?
- A: When it is used with the specific purpose of the research and planned in a systematic way.
- Q: What is a case study defined as?
- A: One of the qualitative research methods used in psychology.
- Q: Who mostly uses the case study method?
- A: Clinical psychologists.
- Q: Which two important figures used the case study method widely?
- A: Sigmund Freud and Jean Piaget.
- Q: What does a case study provide?
- A: An in-depth look at an individual, group or a particular event.
- Q: What does a case study often suggest?
- A: Hypotheses for further studies.
- Q: From whom does a researcher collect information in a case study?
- A: Parents, family members, peers, teachers, colleagues, etc.
- Q: What techniques may be used in a case study?
- A: Observation, interview, psychological tests, etc.

correlation as a statistical tool correlational studies relationship between two or more variables the two variables are said to be correlated correlation coefficient a number between -1.00 to +1.00a positive correlation amount of rehearsal and recall score a negative correlation amount of exercise and level of body fats a zero correlation height and intelligence psychology as a science controversies and criticisms of psychology psychology in pre-paradigmatic state a cumulative body of knowledge objectivity and validity soft research methods inherently subjective predictability and replicability predict behaviour by understanding its causes human behaviour is more difficult to study difficult to replicate objectifying humans psychology is sometimes portrayed as dehumanizing

Ouestions:

Q: What statistical tool is used to understand the relation among variables?

A: Correlation is a statistical tool.

Q: What are studies called that make use of correlation as a statistical tool?

A: Such studies are called correlational studies.

Q: What is correlation used to measure?

A: Correlation is used to measure the relationship between two or more variables.

Q: What indicates that two variables are correlated?

A: If the change in one variable appears to be accompanied by a change in the other variable.

Q: What measures the extent of correlation between two variables?

A: The correlation coefficient.

Q: What is the range of a correlation coefficient?

A: A correlation coefficient is always a number between -1.00 to +1.00.

Q: What does the sign of a correlation coefficient indicate?

A: The direction of the relationship between the variables.

- Q: What type of correlation exists when both variables increase or decrease at the same time?
- A: A positive correlation.
- Q: Between what values is a positive correlation found?
- A: Between 0.00 and +1.00.
- Q: What is an example of positive correlation given in the passage?
- A: The amount of rehearsal and recall score.
- Q: What type of correlation exists when an increase in one variable is associated with a decrease in the other?
- A: A negative correlation.
- Q: Between what values is a negative correlation found?
- A: Between 0.00 to -1.00.
- Q: What example is provided for a negative correlation?
- A: Amount of exercise and level of body fats.
- Q: What type of correlation exists when a change in one variable brings no significant change in the other?
- A: A zero correlation.
- Q: What is the value of the correlation coefficient in zero correlation?
- A: The value of correlation coefficient is found to be 0.
- Q: What is an example of zero correlation mentioned in the passage?
- A: Height and intelligence.
- Q: On what grounds have controversies and criticisms of psychology been made?
- A: On theoretical, practical, ethical and philosophical grounds.
- Q: According to Thomas Kuhn, what state is psychology still in?
- A: Psychology is still in a pre-paradigmatic state.
- Q: What has psychology not yet succeeded in producing?
- A: A cumulative body of knowledge that has a clear conceptual core agreed upon by experts.
- Q: What kind of research methods do some areas of psychology rely on?
- A: Soft research methods such as surveys and questionnaires.
- Q: What methods are described as inherently subjective?
- A: Introspection and psychoanalysis.
- Q: What is a major goal of psychology?
- A: To predict behaviour by understanding its causes.
- Q: Why is making exact predictions difficult in psychology?
- A: Because people respond differently in different situations.

- Q: What is more difficult to study than particles and chemical compounds?
- A: Human behaviour.
- Q: Why are test results in psychology harder to control and replicate?
- A: Because they are more varied, harder to control and difficult to replicate.
- Q: Who criticizes psychology for objectifying humans?
- A: Some existential and humanistic psychologists.
- Q: Why is psychology sometimes portrayed as dehumanizing?
- A: Because it treats human beings as things, as objects that can be examined by experiments.

importance of rationality

human behaviour is dynamic and complex

attaining happiness is man's greatest aim

irrational influences

social norms, values and ethics

application of scientific knowledge

improving the quality of life

adaptive reasoning, good judgement and good decision making

the ability to perform successfully in naturalistic settings

Rational Emotive Behavioural Therapy

values of rational living

rational people are psychologically healthy people

understanding self-interest and social interest

self-direction

rational people are highly tolerant

willingness to accept behaviour and beliefs of others

flexibility

unbiased in their thoughts and actions

self-acceptance and self-responsibility

rationality as a personal philosophy

BE RATIONAL

balance between self-interest and interest of others

estimate the time, efforts, gains and losses

respect oneself and others

affiliate with others

tolerate oneself and others

integrate personal wellbeing with social wellbeing

optimize potential fully

navigate path of success

accept the limitations and overcome them

live life fully

Questions:

Q: What does psychology try to establish as a science?

A: Psychology tries to establish laws that govern human behaviour.

Q: What is man's greatest aim in life according to the passage?

A: Attaining happiness is man's greatest aim in life.

Q: What should one not compromise for being happy?

A: One should not compromise on social norms, values and ethics.

Q: When are sciences appreciated by society?

A: When application of scientific knowledge improves the quality of life.

Q: How does psychology help in improving the quality of life?

A: By applying the concept of rationality in day-to-day life.

Q: What did Stanovich and his colleagues state about rationality?

A: Rationality involves adaptive reasoning, good judgement and good decision making.

Q: How did Sternberg and his colleagues define Practical Intelligence?

A: The ability to perform successfully in naturalistic settings in a way that is consistent with one's goal.

Q: Who proposed Rational Emotive Behavioural Therapy?

A: Dr. Albert Ellis.

Q: What did Dr. Albert Ellis say about rational people?

A: Rational people are psychologically healthy people.

Q: What slogan is associated with Rational Emotive Behavioural Therapy?

A: Safeguard your self-interest and know others interest.

Q: What do rational people assume responsibility for according to self-direction?

A: Their own lives.

Q: What is tolerance described as in the passage?

A: The willingness to accept behaviour and beliefs of others that are different from one's own.

Q: What kind of people are rational people found to be?

A: Rational people are found to be healthy individuals.

Q: What do rational people accept unconditionally?

A: Rational people accept themselves unconditionally.

Q: According to Dr. Albert Ellis, what helps an individual to attain many goals in life and to be happy?

A: Rationality as a personal philosophy.

Q: What must a person be for being happy?

A: A person must BE RATIONAL.

Q: What does the letter B stand for in BE RATIONAL?

A: Balance between self-interest and interest of others.

O: What does the letter E stand for in BE RATIONAL?

A: Estimate the time, efforts, gains and losses.

Q: What does the letter R stand for in BE RATIONAL?

A: Respect oneself and others.

Q: What does the letter A stand for in BE RATIONAL?

A: Affiliate with others.

Q: What does the letter T stand for in BE RATIONAL?

A: Tolerate oneself and others.

- Q: What does the letter I stand for in BE RATIONAL?
- A: Integrate personal wellbeing with social wellbeing.
- Q: What does the letter O stand for in BE RATIONAL?
- A: Optimize potential fully.
- Q: What does the letter N stand for in BE RATIONAL?
- A: Navigate path of success.
- Q: What does the second A stand for in BE RATIONAL?
- A: Accept the limitations and overcome them.
- Q: What does the letter L stand for in BE RATIONAL?
- A: Live life fully.